

# **AUTOMATED VIDEO PRODUCTION SYSTEM AND METHOD USING EXPERT VIDEO PRODUCTION RULES FOR ONLINE PUBLISHING OF LECTURES**

## **Abstract of Disclosure**

An automated system and method for producing videos using expert video production rules. The automated video production system and method of the present invention is particularly well-suited for the online publishing of lectures. The system of the present invention includes a camera system for capturing the lecture, such as an audience-tracking camera and a non-intrusive lecturer-tracking camera. Moreover, each camera may be controlled by a cinematographer. Tracking of a subject is performed using a history-based, reduced-motion tracker that sets up a camera shot based on the subject's movement history and leaves the shot fixed until the camera is switched. The system also includes a virtual director module having a probabilistic finite state machine (FSM) module that uses probabilistic rules and the expert video production rules to determine a current camera view.

## Figures

Figure 1: A diagram illustrating the structure of a document. It shows a vertical sequence of elements: a title, a list of figures, and a list of tables. The title is at the top, followed by the list of figures, and then the list of tables. The list of figures is a vertical sequence of figure numbers and titles, and the list of tables is a vertical sequence of table numbers and titles.